Data Sheet
FUJITSU Server PRIMERGY TX140 S2 Mono-Socket Intel® Xeon® processor server

Expandable all-round server for SMEs

Fujitsu Server PRIMERGY TX Tower Servers are ideal for use in SMEs or branch offices. They increase operational efficiency by providing rock solid, record-breaking, energy efficient performance. That performance is built on 20-years of pioneering work in Green IT. As a customer, you benefit from a reduction in your organization's environmental impact and lower running costs. The reliability is proven by testing the machines through 5000 boot cycles – far more than other vendors do. PRIMERGY TX servers are also easy to manage via the PRIMERGY ServerView Suite, reducing IT admin workload and costs. Plus, tower to rack conversion kits are available for most TX systems, ensuring investment protection.

PRIMERGY TX140 S2

The PRIMERGY TX140 S2 is the ideal robust and cost-efficient server for small and medium-sized businesses (SMB) or branch offices. It offers best Intel® Xeon® E3 performance and solid expandability thanks to hot-plug storage drives. The optionally redundant power supply and a choice of different RAID controllers ensure high availability and peace of mind. Thanks to its compact housing and extremely low operating noise the server is ideally suited for showrooms or offices, for example under the desk. The optional support of legacy PCI adapter cards makes the PRIMERGY TX140 S2 optimally suited for special solutions, such as telephone or security systems. Furthermore, the comprehensive Fujitsu ServerView® Suite provides support for administrators during server installation, deployment and administration. The PRIMERGY TX140 S2: an excellent long-term investment.

Features & Benefits

Main Features	Benefits
Cost-effective performance and availability	
■ Latest Intel® Xeon® E3 v3 series technology	■ Increased performance of up to 15 % compared to the previous generation
■ Optionally redundant power supply unit	■ Optimized for classic server tasks like business applications, file, print or databases
	■ Redundant power supply units for peace of mind
Optimized for SMEs	
■ Low noise emissions through optimized air flow and Fujitsu's Cool-Safe™ technology	■ Silent operation for use in offices or showrooms
■ New compact 4 U chassis	■ So small and silent that it might even be placed under desks
■ Fujitsu ServerView Suite including tools for installation and deployment, permanent status monitoring and control	■ The comprehensive tools of the Fujitsu ServerView Suite eases the administrator's life
Lifecycle investment protection	
■ Solid scalability of up to 4 DIMMs with 32 GB memory, up to 8 storage drives and 4 PCI slots	■ Meet today's demand and be prepared for future requirements
■ Optional support for legacy PCI cards	■ Support for special solutions like telephone or security systems
■ Optional tower to rack conversion kit and extensive connectivity options	■ The TX140 S2 grows as your company grows, making it an excellent long-term investment

Technical details

PRIMERGY TX140 S2				
Housing types	Tower	Tower	Tower	Tower
Storage drive architecture	3.5-inch	2.5-inch	3.5-inch	2.5-inch
Power supply	Standard	Standard	Hot-plug	Hot-plug

Mainboard	
Mainboard type	D3239
Chipset	Intel® C224
Processor quantity and type	1 x Intel® Pentium® processor / Intel® Core™ i3 processor / Intel® Xeon® processor E3-1200v3 product family
Processor	Intel® Core™ i3-4330 processor (2C/4T, 3.50 GHz, TLC: 4 MB, Turbo: No, 1,600 MHz, 54 W)
	Intel® Pentium® processor G3420 (2C/2T, 3.20 GHz, TLC: 3 MB, Turbo: No, 1,600 MHz, 54 W)
	Intel® Xeon® processor E3-1220v3 (4C/4T, 3.10 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1230v3 (4C/8T, 3.30 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1240v3 (4C/8T, 3.40 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1265Lv3 (4C/8T, 2.50 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 45 W)
	Intel® Xeon® processor E3-1270v3 (4C/8T, 3.50 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 80 W)
	Intel® Xeon® processor E3-1280v3 (4C/8T, 3.60 GHz, TLC: 8 MB, Turbo: Yes, 1,600 MHz, 82 W)
Memory slots	4
Memory slot type	DIMM (DDR3) UDIMM
Memory capacity (min. - max.)	4 GB - 32 GB
Memory protection	ECC
Memory options	2 GB (1 module(s) 2 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
Memory modules notes	1333MHz or 1600 MHz memory modules

Interfaces	
USB 2.0 ports	6
USB 3.0 ports	4 (2x external rear, 2x external front)
Graphics (15-pin)	1 analog graphics interface derived from iRMC (up to 1600x1200 or 1920x1080 at 16bpp)
Serial connection	1 x serial RS-232-C, usable for iRMC or system or shared
LAN / Ethernet	2 x1 Gb/s Ethernet; RJ45
Management LAN (RJ45)	1 x dedicated management LAN port for iRMC S4 (10/100/1000 Mbit/s) Management LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller	
RAID controller	Optionally integrated RAID 0/1 or RAID 5/6 controller for SAS base units (occupies one PCIe slot). additional RAID controller options are described under Components RAID controller
SATA Controller	Intel® C224, 2 ports used for accessible drives 4 port for internal SATA HDDs with RAID 0, 1, 10 for Windows and Linux;
LAN Controller	Intel® i217 + Intel® i210 onboard, 2 x 10/100/1000 Mbit/s Ethernet, Intel® i217LM: 2xTX/2xRX, iSCSI remote boot support, APM wake up. Intel® i210, 4xTX/4xRX, iSCSI and PXE 2.0-remote Boot via LAN, WoL. Service LAN: Realtek RTL8211E

Onboard or integrated Controller		
Remote Management Controller	Integrated Remote Management Controller (iRMC S4, 256 MB attached memory incl. graphics controller) IPMI 2.0 compatible	
Trusted Platform Module (TPM)	Infineon / 1.2 (option)	
Slots		
PCI-Express 3.0 x8	2 x (up to 240 mm length)	
PCI-Express 2.0 x1 (mech. x4)	1 x (up to 167 mm lenght)	
PCI-Express 2.0 x4 (mech. x8)	1 x (up to 167 mm length)	
Slot Notes	In SAS configuration 1x PCI-Express occupied by modular RAID controller. **In configurations with Intel® Core™ i3 or Intel® Pentium® processors slots are operated with PCI-Express 2.0.**	
Drive bays		
Storage drive bays	3.5-inch or 2.5-inch hot-plug SAS/SATA	
Accessible drive bays	3 x 5.25/1.6-inch	
Notes accessible drives	all possible options described in relevant system configurator	
Drive bays (Base unit specific)		
Storage drive bays	Max. 4x 3.5-inch	Max. 8x 2.5-inch
Accessible drive bays	3 x 5.25/1.6-inch for 1 x backup drive + 1 x ODD	3 x 5.25/1.6-inch for 1 x backup drive + 1 x ODD
General system information		
Number of fans	1	
Fan configuration	1 standard fan	
Fan notes	non redundant / non hot-plug	
Operating panel		
Operating buttons	On/off switch NMI button Reset button	
Status LEDs	System status (orange / yellow) Identification (blue) Hard disks access (green) Power (orange / green) At system rear side: System status (orange / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow) CSS (yellow)	
BIOS		
BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager Remote PXE boot support Remote iSCSI boot support	

Operating Systems and Virtualization Software

Certified or supported operating systems and virtualization software	Microsoft® Hyper-V Server R2 2012
	Microsoft® Windows Server® 2012 R2 Datacenter
	Microsoft® Windows Server® 2012 R2 Standard
	Microsoft® Windows Server® 2012 R2 Essentials
	Microsoft® Windows Server® 2012 R2 Foundation
	Microsoft® Windows Storage Server 2012 R2 Standard
	Microsoft® Hyper-V Server 2012
	Microsoft® Windows Server® 2012 Datacenter
	Microsoft® Windows Server® 2012 Standard
	Microsoft® Windows Server® 2012 Essentials
	Microsoft® Windows Server® 2012 Foundation
	Microsoft® Windows Storage Server 2012 Standard
	Microsoft® Hyper-V™ Server 2008 R2
	Microsoft® Windows Server® 2008 R2 Datacenter
	Microsoft® Windows Server® 2008 R2 Enterprise
	Microsoft® Windows Server® 2008 R2 Standard
	Microsoft® Windows Server® 2008 R2 Foundation
	Microsoft® Windows® Small Business Server 2011 Premium Add-On
	Microsoft® Windows® Small Business Server Standard 2011
	VMware vSphere™ 5.5 Embedded
	VMware vSphere™ 5.5
	SUSE® Linux Enterprise Server 11
	Red Hat® Enterprise Linux 6
	Red Hat® Enterprise Linux 5
Operating system release link	http://docs.ts.fujitsu.com/dl.aspx?id=d4ebd846-aa0c-478b-8f58-4cfbf3230473
Operating system notes	Support of other Linux derivatives on demand

Server Management

Standard	ServerView Suite - Deploy SV Installation Manager SV Scripting Toolkit SV Deployment Manager (30-day trial version) ServerView Suite - Control SV Operations Manager incl. PDA and ASR & R (Prefailure and Analysis; Automatic Server Recovery and Restart) SV Performance Management SV Power Management SV RAID Manager ServerView Suite - Maintain SV Remote Management (iRMC) SV Update Management (BIOS, Firmware, Windows Drives and SV Agents) SV Asset Management SV Online Diagnostics ServerView Suite - Integrate SV Integration packs e.g. for Microsoft System Center, Nagios, HP, SIM, HP NNM, IBM Tivoli, Altiris Deployment Solutions and others
Option	ServerView Suite - Deploy SV Deployment Manager (full version) ServerView Suite - Maintain iRMC Advanced Pack incl. Advanced Video Redirection (AVR) and Remote Storage ServerView Suite - Integrate SV Integration pack for Fujitsu ManageNow® solution
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.

Dimensions / Weight	
Floor-stand (W x D x H)	177 x 560 x 455 mm
Rack (W x D x H)	483 x 495 x 175 mm
Dimension notes	**Floorstand Width 306 mm with tilt protection; depth measured excludes handles on redundant PSU. Rack depth excludes handles of redundant PSU and rack front.**
Mounting Depth Rack	543 mm
Height Unit Rack	4 U
Weight	Rack: 12.5kg - 20kg; Tower: 15kg - 23 kg
Weight notes	Actual weight may vary depending on configuration
Rack integration kit	Rack integration kit can be ordered as option

Environmental	
Operating ambient temperature	10 - 35 °C
Operating relative humidity	10 - 85 % (non condensing)
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Sound pressure (LpAm)	SATA: 25 dB(A) idle mode/ 25 dB(A) operation mode; SAS: 31 dB(A) idle mode/ 34 dB(A) operation mode
Sound power (LWAd; 1B = 10dB)	SATA: 4.2 B idle mode/ 4.2 B operation mode ; SAS: 4.8 B idle mode/ 5.2 B operation mode
Noise notes	Noise emissions and operation modes depend on system configuration.

Electrical values	
Power supply configuration	1x standard, 1x hot-plug or 2x redundant hot-plug
Max. output of single power supply	450 W
Standard power supply output	300 W (90 % efficiency)
Hot-plug power supply output	450 W (94 % efficiency, 80 PLUS platinum)
Hot-plug power supply redundancy	Yes
Rated voltage range	100 V - 240 V
Rated frequency range	47 Hz - 63 Hz
Rated current max.	6 A / 3 A (100 V / 240 V)
Active power (min. configuration)	23 W
Active power (max. configuration)	203 W
Active power note	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Apparent power (max. configuration)	247 VA
Heat emission	730.8 kJ/h (692.7 BTU/h)
Power Supply Notes	The active power and apparent power values may change according to configuration.

Compliance	
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Germany	GS
Europe	CE Class A *
USA/Canada	CSA us ULc/us FCC Class A
Japan	VCCI
Russia	GOST-R
South Korea	KC
China	CCC
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
Compliance notes	* Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Components

Storage drives	SSD SATA, 6 Gb/s, 800 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 400 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 400 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 200 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 100 GB, MLC, hot-plug, 2.5-inch, enterprise
	SSD SATA, 6 Gb/s, 100 GB, Mainstream Endurance, hot-plug, 2.5-inch, enterprise
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 3.5-inch, economic
	HDD SATA, 6 Gb/s, 250 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SATA, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SATA, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 900 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 600 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 500 GB, 7,200 rpm, hot-plug, 2.5-inch, business critical
	HDD SAS, 6 Gb/s, 450 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 450 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 3.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 300 GB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 146 GB, 15,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 4 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 3 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 2 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 1.2 TB, 10,000 rpm, hot-plug, 2.5-inch, enterprise
	HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 3.5-inch, business critical
	HDD SAS, 6 Gb/s, 1 TB, 7,200 rpm, hot-plug, 2.5-inch, business critical
Backup Drives	LTO4HH Ultrium, 800 GB, 120 MB/s, half height, SAS 6Gb/s
	LTO5HH Ultrium, 1,500 GB, 140 MB/s, half height, SAS 6Gb/s
	LTO6HH Ultrium, 2,500 GB, 160 MB/s, half height, SAS 6Gb/s
	RDX Drive, 320 GB, 500 GB, 1 TB , 25 MB/s, half height, USB 3.0
Optical drives	Blu-ray Disc™ Triple Writer, (6x BD-ROM ; 8x DVD; 24x CD), slimline, SATA I
	DVD-ROM, (16xDVD; 48xCD), half height, SATA I
	DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I
SCSI / SAS Controller	SAS Ctrl. 6 Gbit/s 8 ports int. PCIe Gen2 x8
RAID Controller	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 5/6 512MB (D2616), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, Optional BBU (based on LSI SAS2108)
	RAID 5/6 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 1GB (D3116C), 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 1 GB, Optional FBU (based on LSI SAS2208)
	RAID 0/1 Ctrl., SAS/SATA 6 Gbit/s, Fujitsu RAID Ctrl SAS 6G 0/1 (D2607), 8 ports int. RAID level: 0, 1, 10, No BBU support

Communication, Network	Ethernet Ctrl. 1 x 10 MBit/s#100 MBit/s#1 Gbit/s PCIe Gen1.1 x1 (Intel®)
	Ethernet Ctrl. 1 x 1 Gbit/s PCIe x4 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s#1 Gbit/s#100 MBit/s PCIe Gen2.1 x8 (Intel®)
	Ethernet Ctrl. 2 x 10 Gbit/s PCIe Gen2 x8 (Fujitsu)
	Ethernet Ctrl. 2 x 1 Gbit/s PCIe x4 (Fujitsu)
	Ethernet Ctrl. 4 x 1 Gbit/s PCIe x4 (Fujitsu)
Graphics add on cards	NVIDIA® Quadro® NVS 300, PCIe x1, 2x DVI/VGA

Warranty	
Standard Warranty	1 year
Service level	Onsite Service (depending on country)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty/Index.asp?LNG=COM
Maintenance and Support Services - the perfect extension	
Support Pack Options	Globally available in major business areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time 24x7, 4h Onsite Response Time
Recommended Service	24x7, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY TX140 S2, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY TX140 S2, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment

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